

HYODAE SEO

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EDUCATION

- 2007 Ph.D., Oceanography, Scripps Institution of Oceanography, University of California San Diego
 2002 B.S., Meteorology, Yonsei University, Seoul, South Korea

POSITIONS HELD

- 2014 – Present, *Associate Scientist*
 2010 – 2014 *Assistant Scientist*, Department of Physical Oceanography, WHOI
 2009 – 2010 *Visiting Assistant Researcher*, IPRC, University of Hawaii, Manoa
 2008 – 2009 *NOAA Climate and Global Change Postdoctoral Fellow*, International Pacific Research Center, University of Hawaii, Manoa
 2007 – 2008 *NOAA Climate and Global Change Postdoctoral Fellow*, UCLA
 2007 *Visiting Scientist*, International Pacific Research Center, Univ. Hawaii, Manoa
 2002 – 2007 *Graduate Research Assistant*, Scripps Institution of Oceanography, UCSD

PUBLICATIONS

Manuscripts in preparation or under review

- Seo, H., Eddy-driven air-sea interaction and feedback in the western Arabian Sea. *J. Climate*. *sub judice*
- Seo, H., Y.-O. Kwon, T. M. Joyce, and C. C. Ummenhofer, On the nonlinear forced response of the North Atlantic atmosphere to meridional shifts of the Gulf Stream path, *J. Climate*, *Under revision*.
- Morrow, R., L.-L. Fu, T. Farrar, H. Seo, P.-Y. Le Traon, Ocean eddies and mesoscale variability. CRC Book on Satellite Altimetry, Chapter 12, *sub judice*
- Pullen, J. R. Allard, H. Seo, A. J. Miller, S. Chen, L. P. Pezzi, P. Chu, and T. Smith, Coupled ocean-atmosphere forecasting at short and medium time scales. Chapter 23, The Science of Ocean Prediction, Volume 17 of The Sea, *sub judice*.
- Miller, A. J., M. Collins, S. Gualdi, T. G. Jensen, V. Misra, L. P. Pezzi, D. W. Pierce, D. Putrasahan, H. Seo, and Y.-H. Tseng, Coupled Ocean-Atmosphere-Hydrology Modeling and Predictions. Chapter 20, The Science of Ocean Prediction, Volume 17 of The Sea, *accepted*.

2017

- Jongaramrungruang, S., H. Seo, and Caroline C. Ummenhofer, Intraseasonal rainfall variability in the Bay of Bengal during the Summer Monsoon: Coupling with the ocean and modulation by the Indian Ocean Dipole, *Atmos. Sci. Lett.*, *in press*.

2016

- Chowdary, J. S., G. Srinivas, T. S. Fousiya, A. Parekh, C. Gnanaseelan, H. Seo, and J. A. MacKinnon, 2016: Representation of Bay of Bengal Upper-Ocean Salinity in General

Circulation Models. *Oceanography*, 29(2), 38–49

- **Seo, H.**, A. J. Miller, and J. R. Norris, 2016: Eddy-wind interaction in the California Current System: dynamics and impacts. *J. Phys. Oceanogr.*, 46, 439-459
- Brink, K. H. and **H. Seo**, 2016: Continental Shelf Baroclinic Instability 2: Oscillating wind forcing. *J. Phys. Oceanogr.*, 46, 569–582

2015

- Oltmanns, M., F. Straneo, **H. Seo**, G. W. K. Moore, 2015: The role of wave dynamics and small-scale topography for downslope wind events in southeast Greenland. *J. Atmos. Sci.*, 72, 2786-2805, doi: <http://dx.doi.org/10.1175/JAS-D-14-0257.1>.
- Cavanaugh, N., T. Allen, A. Subramanian, B. Mapes, **H. Seo**, and A. J. Miller, 2015: The Skill of Tropical Linear Inverse Models in Hindcasting the Madden-Julian Oscillation. *Climate Dynm.*, 44, 897-906, DOI:10.1007/s00382-014-2181-x.

2014

- **Seo, H.**, A. Subramanian, A. J. Miller, N. Cavanaugh, 2014: Effect of diurnal cycle in sea surface temperature on the initiation and intensity of convection during DYNAMO. *J. Climate*, 27, 8422-8443, DOI: <http://dx.doi.org/10.1175/JCLI-D-14-00141.1>.
- Park, J.-Y., J.-S. Kug, **H. Seo**, and J. Bader, 2014: Impact of bio-physical feedbacks on the tropical climate in coupled and uncoupled GCMs. *Climate Dynm.*, 43, 1811-1827, DOI: 10.1007/s00382-013-2009-0.
- **Seo, H.**, Y.-O. Kwon, and J.-J. Park, 2014: On the effect of the East/Japan Sea SST variability on the North Pacific atmospheric circulation in a regional climate model. *J. Geophys. Res.–Atmospheres*, 119, 418-444, DOI: 10.1002/2013JD020523.
- Subramanian, A, M. Jochum, A. J. Miller, R. Neale, **H. Seo**, D. Waliser, and R. Murtugudde, 2014: The MJO and Global warming: A study in CCSM4, *Climate Dynm.*, 42, 2019-2031, DOI: 10.1007/s00382-013-1846-1.

2013

- **Seo, H.**, and J. Yang, 2013: Dynamical response of the Arctic atmospheric boundary layer process to uncertainties in sea ice. *J. Geophys. Res.–Atmospheres*, 118, 12383-12402, DOI: 10.1002/2013JD020312.
- Putrasahan, D., A. J. Miller, and **H. Seo**, 2013: Regional coupled ocean-atmosphere downscaling in the Southeast Pacific: Impacts on upwelling, mesoscale air-sea fluxes, and ocean eddies. *Ocean Dynm.*, 63, 463-488, DOI: 10.1007/s10236-013-0608-2.
- **Seo, H.**, and S.-P. Xie, 2013: Impact of ocean warm layer thickness on the hurricane intensity change in a regional coupled model. *Met. Atmos. Phys.*, 122, 19-32, DOI: 10.1007/s00703-013-0275-3.
- Putrasahan, D. A. J. Miller, and **H. Seo**, 2013: Isolating Mesoscale Coupled Ocean-Atmosphere Interactions in the Kuroshio Extension Region. *Dyn. Atmos. Oceans*, 63, 60-78, DOI: <http://dx.doi.org/10.1016/j.dynatmoce.2013.04.001>.

2012

- **Seo, H.**, K. H. Brink, C. E. Dorman, D. Koracin, and C. A. Edwards, 2012: What determines the spatial pattern in summer upwelling trends on the U.S. West Coast? *J. Geophys. Res.–Oceans*, 117, C08012, DOI: 10.1029/2012JC008016.

- Alexander, M. A., **H. Seo**, S.-P. Xie, J. D. Scott, 2012: ENSO's impact on the gap wind regions of the eastern tropical Pacific Ocean. *J. Climate*, 25, 3549-3565, DOI: <http://dx.doi.org/10.1175/JCLI-D-11-00320.1>.

2006-2011

- **Seo, H.**, and S.-P. Xie, 2011: Response and Impact of Equatorial Ocean Dynamics and Tropical Instability Waves in the Tropical Atlantic under Global Warming: A regional coupled downscaling study. *J. Geophys. Res.–Oceans*. 116, C03026, DOI: 10.1029/2010JC006670.
- **Seo, H.**, S.-P. Xie, R. Murtugudde, M. Jochum, and A. J. Miller, 2009: Seasonal effects of Bay of Bengal barrier layer dynamics in a regional coupled model. *J. Climate*, 22, 6577-6596, DOI: 10.1175/2009JCLI2990.1.
- **Seo, H.**, R. Murtugudde, M. Jochum, A. J. Miller, 2008: Modeling of Mesoscale Coupled Ocean-Atmosphere Interaction and its Feedback to Ocean in the Western Arabian Sea. *Ocean Modell.*, 25, 120-131, DOI: 10.1016/j.ocemod.2008.07.003.
- **Seo, H.**, M. Jochum, R. Murtugudde, A. J. Miller, J. O. Roads, 2008: Precipitation from African Easterly Waves in a Coupled Model of the Tropical Atlantic, *J. Climate*, 21, 1417-1431, DOI: <http://dx.doi.org/10.1175/2007JCLI1906.1>.
- Small, R. J., S. de Szoeke, S.-P. Xie, L. O'Neill, **H. Seo**, Q. Song, P. Cornillon, M. Spall, S. Minobe, 2008: Air-Sea Interaction over Ocean Fronts and Eddies. *Dyn. Atmos. Oceans*, 45, 274-319, DOI: 10.1016/j.dynatmoce.2008.01.001.
- **Seo, H.**, M. Jochum, R. Murtugudde, A. J. Miller, J. O. Roads, 2007: Feedback of Tropical Instability Wave - induced Atmospheric Variability onto the Ocean. *J. Climate*, 20, 5842-5855, DOI: <http://dx.doi.org/10.1175/JCLI4016.1>.
- **Seo, H.**, A. J. Miller J. O. Roads, 2007: The Scripps Coupled Ocean-Atmosphere Regional (SCOAR) model, with applications in the eastern Pacific sector. *J. Climate*, 20, 381-402, DOI: <http://dx.doi.org/10.1175/JCLI4016.1>.
- **Seo, H.**, M. Jochum, R. Murtugudde, A. J. Miller, 2006: Effect of Ocean Mesoscale Variability on the Mean State of Tropical Atlantic Climate. *Geophys. Res. Lett.*, 33, L09606, DOI: 10.1029/2005GL025651.

Non-Peer Reviewed

- **Seo, H.**, 2007: Mesoscale Coupled Ocean-Atmosphere Interaction. Ph.D. thesis, University of California, San Diego

CURRENT PROJECTS

- NOAA CVP Climate Process Teams (2015-2018): Improvement of MJO simulation in NCEP Coupled Forecast System: Upper ocean and air-sea coupled processes. PIs: Shinoda (TAMUCC), Fu (U. Hawaii), Lien (UW/APL), Soloviev (Nova), Wang (NCEP), Seo
- ONR Young Investigator Program (2015-2018): Dynamics, Impacts, and Predictability of Coupled Ocean-Atmosphere Interactions in the Northern Indian Ocean. PI: Seo
- WHOI OCCI (2015-2016): A regional coupled model with explicit convection: diurnal rainfall and air-sea-land interaction in the Maritime Continent. PI: Seo
- NSF (2014-2016): EaSM-3: Collaborative Research Quantifying Predictability Limits, Uncertainties, Mechanisms, and Regional Impacts of Pacific Decadal Climate Variability. PIs: Miller (SIO), Di Lorenzo (Georgia Tech), Tseng (NCAR), Seo

- NSF (2014-2016): Decadal Variability in the North Atlantic Extra-Tropics: The Role of Coupling Between Atmospheric Blocking and the Atlantic Multidecadal Oscillation. PIs: Ummenhofer, Seo, Kwon, Joyce (all at WHOI)
- NASA (2013-2015): Coupling Between the Atmospheric Intra-Seasonal Variability and Ocean Circulation in the Northern Hemisphere. PIs: Kwon, Joyce, and Seo (all at WHOI)

AWARDS

- ONR Young Investigator Award, Class of 2015 (2015-2018)
- NOAA Climate and Global Change Postdoctoral Fellowship, Class 17 (2007-2009)
- Physical Oceanography Dissertation Symposium V, Honolulu, October 2008
- NCAR Advanced Study Program (ASP) Graduate Student Visiting Program Fellowship, June-October 2006
- Scripps Institution of Oceanography Frieman Director's Prize for Excellence in Graduate Student Research, August 2006
- Outstanding Student Paper Award, Ocean Sciences Meeting, Honolulu, 2006

COURSES TAUGHT

- Introduction to Observational Physical Oceanography, MIT/WHOI Joint Program Course 12.808, Fall, 2016, Co-teaching with M. Andres and L. Pratt
- Guest Lecture on "Intraseasonal Variability in the Tropics". Climate Variability and Diagnostics, MIT/WHOI Joint Program, Winter 2015

TEACHING AND ADVISING ACTIVITIES

- Mr. Channing Prend (Columbia University): WHOI Summer Student Fellow (Summer of 2016): Research Title: Impact of freshwater plumes on intraseasonal upper ocean variability from moored observations in the Bay of Bengal
- Mr. Xin Zhou (Florida Institute of Technology) MS thesis committee member, 2015-2016
- Mr. Siraput Jongaramrungruang (University of Cambridge): WHOI Summer Student Fellow (co-advised with C. Ummenhofer, Summer of 2015): Research Title: Interannual modulation of intraseasonal air-sea coupling in Bay of Bengal
- Ms. Alicia Camacho (Valparaiso University, now at Stony Brook University): UCAR SOARS Protégé (co-advised with Y.-O. Kwon, Summer of 2015): Research Title: North Atlantic Oscillation, Jet and Blocking in CESM1 Large Ensemble Simulations.
- Mr. Carlos Martinez (Texas A&M University): UCAR SOARS Protégé (co-advised with Y.-O. Kwon and J. Small, Summer of 2014): Research Title: North Atlantic Atmospheric Blocking and Atlantic Multidecadal Oscillation in CESM1 Large Ensemble Simulations. Carlos won the Grand Prize at the Virtual Poster Showcase, AGU 2014.
- Ms. Sara Bosshart (MIT-WHOI Joint Program) MS thesis committee member, 2013

OTHER PROFESSIONAL ACTIVITIES

Society Memberships:

- American Geophysical Union (2002-Present)
- American Meteorological Society (2002-Present)
- The Oceanography Society (2012-Present)

- The Korean Society of Oceanography (2012-Present)

Community Activities:

- Member: US CLIVAR Process Study and Model Improvement Panel: 2016-Present
- Associate Editor, Atmospheric Science Letters, 2015-Present
- Member: AMS Scientific and Technological Activities Commission (STAC) committee on Coastal Environment, 2011-Present
- Panelist: Agency proposal review panels (NASA Surface Water Ocean Topography (SWOT), July 24-26, 2012)

Journal Reviewer:

- *Atmospheric Science Letters, Bulletin of American Meteorological Society, Climate Dynamics, Continental Shelf Research, Dynamics of Atmosphere and Oceans, Geophysical Research Letters, Journal of Advances in Modeling Earth Systems, Journal of Climate, Journal of Marine Systems, Journal of Physical Oceanography, Progress in Oceanography, Journal of Geophysical Research –Atmosphere/Oceans, Nature Geosciences, Ocean Dynamics, Ocean Modelling, Remote Sensing, Scientific Reports*

Proposal Reviewer:

NOAA (CPO); NSF (OCE Physical Oceanography, ATM Climate and Large-scale Dynamics, ATM Physical and Dynamic Meteorology); The Portuguese Foundation for Science and Technology (FCT); The French Research Agency (ANR); Programme on National Monsoon Mission (India).

WHOI Committee and Service

- WHOI Summer Student Fellowship (SSF) Physical Oceanography Department Coordinator
- Advisory committee for the WHOI High Performance Computing Facility: 2010-Present
- Physical Oceanography Department Seminar Series Organizer, 2010-2011

Meeting Convener:

- Program Chair for 14th Symposium on the Coastal Environment, AMS Meeting, 2016.
- Air-sea interactions in coastal environments AMS Annual Meeting, Phoenix, AZ, 2015
- Regional climate modeling in the North Pacific, PICES Annual Meeting, Yeosu, 2014
- East Asian Marginal Seas: sea surface temperature variability and ocean-atmosphere process, Ocean Sciences Meeting, Honolulu, HI, February 2014
- Climate Trends and Projections in the Coastal Environment, American Meteorological Society Annual Meeting, Austin, TX, January 2013
- Marine Regional Integrated Assessments: Observations, Predictions, and Uncertainty, WCRP Open Science Conference, Denver, CO, 2011
- Regional and Mesoscale Coupled Air-Sea Modeling, Ocean Sciences Meeting, Portland, OR, 2010

LECTURES & SEMINARS

2016

- Predominant nonlinear atmospheric response to meridional shift of the Gulf Stream path, AMS Air-Sea Interaction Workshop, 2016/08, Oral Presentation
- Dynamics and impact of eddy-driven air-sea interactions in the California Current System, SIO CASPO Seminar, 2016/05, Department Seminar
- Dynamics and impact of eddy-driven air-sea interactions in the California Current System, WHOI PO Seminar, 2016/04, Department Seminar
- Predominant nonlinear atmospheric response to meridional shift of the Gulf Stream path, Ocean Sciences Meeting, Feb. 2016

2015

- (Invited) SST variability in the East Asian marginal seas: mechanisms for local and remote atmospheric impacts. AGU, Dec. 2015
- Dynamics and impacts of eddy-driven air-sea interaction in a regional air-sea coupled model for the US West Coast. AGU, Dec. 2015
- Coupled impacts of the diurnal cycle of sea surface temperature on the Madden-Julian Oscillation, IUGG, Prague, Jun. 25, 2015
- Coupled modeling of eddy-wind interaction in the California Current System, IUGG, Prague, Jun. 30, 2015
- Eddy-driven air-sea interaction and feedback in the western Arabian Sea, ONR NASCar Planning Meeting, Reston VA, Jun. 2-3, 2015
- Diurnal SST and diurnal rainfall in the Maritime Continent, YMC Planning Meeting, NCAR, May 27-29, 2015
- Coupled Ocean-Atmosphere Interaction in the Northern Indian Ocean: Motivation and Proposed Research, ONR SIRI Science Meeting, U. Mass. Dartmouth, May 26-28, 2015
- Coupled modeling of eddy-wind interaction in the California Current System: Impact on eddy kinetic energy and Ekman pumping, AMS Annual Meeting, Jan. 5, 2015

2014

- (Invited) Eddy-wind interaction in the California Current System - Eddy kinetic energy and Ekman pumping, Korean Institute of Ocean Science and Technology, Dec. 19, 2014
- Eddy-wind interaction in the California Current System: Eddy kinetic energy and Ekman pumping, Kyushu University, Dec. 15, 2014
- Coupled impacts of the diurnal cycle of sea surface temperature on the Madden-Julian Oscillation, International Regional Spectral Meeting, JAMSTEC, Japan, Nov. 27-28, 2014
- Coupled impacts of the diurnal cycle of sea surface temperature on the Madden-Julian Oscillation, Korean Oceanographic Society Meeting, Jinhae, Korea, Nov. 7, 2014
- (Invited) Regional coupled modeling of eddy-wind interaction in the California Current System: Eddy kinetic energy and Ekman pumping, PICES Annual Meeting, Yeosu, Korea, Oct. 21, 2014
- Effect of Eddy-Wind Interaction on Ekman pumping and Eddy Kinetic Energy in the California Current System: A Regional Coupled Modeling Study, OFES Workshop, Aizu, Oct. 2-3, 2014
- Coupled impacts of the diurnal cycle of sea surface temperature on the Madden-Julian Oscillation, Kyushu University, Sep. 26, 2014
- Mesoscale Air-Sea Interactions, WHOI Summer Lecture Series, Jul. 28, 2014
- Effect of the East Asian Marginal Sea SST variability on the North Pacific atmospheric circulation: East/Japan Sea case study, European Geophysical Union, Vienna, Austria,

Apr. 28 - May 1, 2014

- Surface wind response to Arctic sea ice in a regional weather model, WHOI Physical Oceanography Seminar, Apr. 15, 2014
- Effect of the East/Japan Sea SST variability on the on the North Pacific atmospheric circulation, Ocean Sciences Meeting, Honolulu, Feb. 24-28, 2014

2013

- Dynamics of near-surface winds over ocean eddies and sea ice: Regional modeling studies of tropical and arctic atmospheres, University of Rhode Island, GSO Seminar, Dec. 6, 2013
- Predictability and Coupled Dynamics of MJO during DYNAMO: Role of diurnal cycle in the intensity of MJO2, ONR Physical Oceanography Peer Review Program, Monterey, Sep. 23-24
- (Invited) Ocean mesoscale eddies, air-sea interactions and regional climate: regional coupled climate modeling, APEC Climate Center, Busan, Korea, Sep. 13, 2013
- (Invited) Effect of East/Japan Sea SST variability on the North Pacific atmospheric circulation, International Workshop on Regional Climate Models-II, Busan, Korea, Sep. 10-12, 2013
- Dynamical response of the Arctic surface winds to sea ice variability, Climate Implications of Frontal Scale Air-Sea Interaction. NCAR, Aug. 5-7, 2013
- Dynamical response of the Arctic atmospheric boundary layer process to uncertainties in sea ice concentration AMS Polar Meeting, Seattle, April 29 - May 1, 2013
- What determines the spatial pattern in summer upwelling trends on the U.S. West Coast? AMS Annual Meeting Austin, TX, Jan. 9, 2013.

2012

- Role of Ocean Mesoscale Eddies in Air-Sea Interaction and Regional Climate Change. MIT MSEAS Seminar. Nov. 16, 2012
- Role of the East/Japan Sea SST variability in the atmospheric circulation in the North Pacific. AMS 18th Conference on Air-Sea Interaction, Boston. Jul. 12, 2012
- (Invited) Mesoscale air-sea interactions and regional climate change: the Tropical Instability Waves example KORDI, May 30, 2012
- Role of the East/Japan Sea SST variability in the atmospheric circulation in the North Pacific. KORDI-WHOI Workshop, May 25, 2012
- (Invited) Role of the East-Asian marginal sea SST in the regional predictability and the North Pacific climate variability Japan Geoscience Union Meeting, May 23, 2012
- Regional modeling of ocean-atmosphere interaction: from tropics to mid-latitude. Kyushu University, Japan, May 21, 2012

2011

- Effect of Seasonal Freshwater Forcing on the Indian Monsoon: A Regional Coupled Modeling Study Bay of Bengal Monsoon Workshop, WHOI, Nov. 16-18, 2011
- Mesoscale air-sea interactions and regional climate change: Tropical Instability Waves in a regional coupled model. Yonsei University, Seoul, Korea, Oct. 14, 2011
- (Invited) Regional coupled downscaling: Role of mesoscale ocean eddies in climate- Tropical Instability Waves. International Workshop Development and Application of Regional Climate Models. Korea, Oct. 11-12
- Tropical Instability Waves in the Atlantic: Air-sea interactions and climate change, Coupled Ocean-Atmosphere-Land Processes in the Tropical Atlantic, Miami, Mar. 24, 2011

2010

- Regional coupled downscaling of climate and weather, NRL-Stennis Space Center, May 26
- Regional coupled downscaling: mesoscale air-sea interaction and regional climate change, UT-Austin, April 26, 2010
- Regional coupled-downscaling of climate and weather, WHOI, Mar. 23, 2010
- Applications of a regional coupled model to studies of global warming and hurricane-ocean interaction, NCAR, Mar. 4, 2010

2009

- Downscaling Global Warming with a Regional Ocean-Atmosphere Model over the Tropical Atlantic Role of equatorial ocean dynamics, AGU Fall Meeting, Dec. 2009
- Tropical Atlantic response to global warming: Equatorial upwelling and tropical instability waves- International RSM Workshop, Maui, Aug. 4, 2009
- Seasonal effects of Indian Ocean freshwater forcing in a regional coupled model-Barrier Layers and Indian Monsoon- IPRC Annual Symposium, Jun. 2, 2009
- Mesoscale air-sea interaction and feedback in the western Arabian Sea: CLIVAR Western Boundary Current Workshop, Phoenix, Jan. 15, 2009
- Mesoscale air-sea interaction and feedback in the western Arabian Sea: AMS Annual Meeting, Phoenix, Jan. 14, 2009

2008

- Overview of the Scripps Coupled Ocean-Atmosphere Regional Model: ONR Coupled Modeling Workshop, Ballston, VA, Dec. 12, 2008
- Mesoscale ocean-atmosphere interaction due to the ocean mesoscale eddies: Physical Oceanography Dissertation Symposium V, Oct. 6, 2008
- Coupled modeling of mesoscale ocean-atmosphere interactions: tropical instability waves and ocean eddies: NOAA C&GC Summer Institute, Jul. 14, 2008
- Mesoscale ocean-atmosphere interaction in the western Arabian Sea: Dynamic and thermodynamic feedback to the ocean: NCAR CGD Seminar, May 23, 2008
- Mesoscale coupled ocean-atmosphere Interaction; Tropical Instability Waves and Atmospheric Feedback: ESSIC Seminar, University of Maryland, Jan. 18, 2008

2002-2007

- Ocean-Atmosphere Interaction in a High-Resolution Regional Coupled Model: Oceanography Seminar, University of Hawaii, Manoa, Aug. 23, 2007
- Effect of Coupling of Wind and Current on Tropical Instability Waves in the Atlantic Ocean: CLIVAR Tropical Atlantic Variability Meeting, Paris, Oct. 18, 2006
- Tropical Ocean-Atmosphere Interaction in a Regional Coupled High-Resolution GCM: NCAR CGD Seminar, Aug. 23, 2006
- Regional Ocean-Atmosphere Interactions in the Eastern Pacific: TIWs, Mesoscale Eddies and Gap Winds: Woods Hole Oceanographic Institution Seminar, Apr. 2006
- Air-sea coupling associated with the TIWs; high-resolution coupled-model study: Ocean Sciences Meeting, Honolulu, Feb. 24, 2006
- Atmospheric Boundary Layer Response to SST in the Eastern Pacific: AGU Fall Meeting, San Francisco, Dec. 2005
- Tropical Instability Waves and Ocean-Atmosphere Feedback. ROMS User Workshop, La Jolla, Oct. 2005
- Regional Ocean-Atmospheric Feedback in the Eastern Pacific; Gap Winds, TIWs, and Mesoscale Eddies: UCLA AOS 270 Seminar, UCLA, Oct. 12, 2005
- Regional Air-Sea Interaction in the Eastern Pacific: RSM User Workshop, New York, Aug.,

2005

- Development of the Regional Coupled Ocean-Atmosphere Model: AMS Annual Meeting, San Diego, Jan. 2005
- Preliminary Simulation of the Regional Coupled Atmosphere-Ocean Model in the Southern California Coastal Region: RSM User Workshop, Yonsei University, Korea, Aug. 2004

 POSTER PRESENTATION (* Undergraduate student research)

- *Jongaramrungruang, S., H. Seo, C. Ummenhofer, Intraseasonal SST-precipitation coupling during the Indian Summer Monsoon, and its modulation by the Indian Ocean Dipole, Ocean Sciences Meeting, 2016
- *Camacho, A., Y.-O. Kwon, and H. Seo, North Atlantic Oscillation, Jet and Blocking in CESM1 Large Ensemble Simulations. AMS 2016.
- *Martinez, C., Y.-O. Kwon, H. Seo, and J. Small, 2014: North Atlantic Atmospheric Blocking and Atlantic Multidecadal Oscillation in CESM1 Large Ensemble Simulations. AGU 2014 & AMS 2015.
- Dynamics of near-surface wind response to Arctic sea ice European Geophysical Union, Vienna, Austria, Apr. 28 - May 1, 2014.
- Diurnal cycle in SST and the MJO initiation during DYNAMO: A regional coupled modeling study of the near-surface wind response to Arctic sea ice European Geophysical Union, Vienna, Austria, Apr. 28 - May 1, 2014.
- Dynamics of the near-surface wind response to Arctic sea ice Forum for Arctic Modeling and Observational Synthesis (FAMOS), Woods Hole, MA, October 22-25, 2013
- Diagnostics of the MJO and upper ocean variability in a regional coupled model MJO Field Data and Science Workshop, Kona, HI, Mar. 4-8, 2013.
- Sensitivity of Arctic surface boundary layer process to sea ice concentrations: WRF atmospheric modeling study. AOMIP Workshop, WHOI, Oct. 23-25, 2012.
- What determines the spatial pattern in summer upwelling trends on the U.S. West Coast? Ocean Sciences Meeting, Salt Lake City, Utah, Feb., 20-24, 2012.
- Trends in coastal upwelling and sea breeze in the California-Oregon Coast: Land-ocean-atmosphere interactions WCRP Open Science Conference, Denver, 2011.
- Impact of upper ocean warm layer thickness on hurricane intensity change in a regional coupled model. AGU Fall Meeting San Francisco, 2010.
- Regional Coupled Downscaling of Global Warming in the Tropical Atlantic: Response in Equatorial Upwelling and Tropical Instability Waves. Ocean Sciences Meeting, 2010
- Ocean-Atmosphere Interactions in the Eastern Pacific; Coupled Modeling Study. EPOC Meeting, October, 2005
- Atmospheric Boundary Layer Response to SST in the regional air-sea coupled model: EPIC Workshop, Seattle, May, 2005
- Coupling ROMS with RSM: Regional Ocean-Atmosphere Sensitivities: 2nd ROMS/TOMS European Workshop, Venice, Italy, October, 2004